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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,656	02/05/2001	David L. Johnson	AT/K-22162/P1/CGC 2054	2528

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EXAMINER

HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 04/11/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,656

Applicant(s)

JOHNSON ET AL.

Examiner

Cynthia Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/06/02, 6/12/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 2-8, 13-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, last line, is found a limitation that the composition contains no free radical initiator. However, it is not clear what is encompassed by "free radical initiator" in view of many of the onium salts listed on pages 8-9 being known cationic initiators as well as free radical initiators. Smith (3,729,313) disclose diaryliodonium salts as free radical initiators if used with sensitizers inclusive of 4,6-bis (trichloromethyl)-s-triazine, diphenylmethane, xanthane, acridine, methane, polymethine, thiazole, thiazine, azine, aminoketone, porphyrin, colored aromatic polycyclic hydrocarbons, p-substituted aminostyryl compounds and aminotriaryl methanes. In Smith, see particularly col. 2, lines 6-45. Tsao et al (4,156,035) teach aromatic onium salts, especially sulfonium salts, act to polymerize both epoxies and acrylates when mixed as in Table 1, formulation 5, and state in col. 4, lines 37-68, without the addition of the carbonyl type photoinitiators described. There is no mention of using an added sensitizer by Tsao et al for their sulfonium salts to be initiators of acrylates, ie free radical initiators. Crivello et al (4,026,705) teach that a host of sensitizer dyes for with diarylhalonium salts, e.g. iodonium

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salts, and such dyes are inclusive of many of the sensitizers of Smith (3,729,313) as set forth in col. 1 of Crivello et al. The Crivello systems are cationic cure epoxy systems for the most part. Smetana et al (6,350,792 B1) recognizes the duality of some cationic initiators as free radical initiators in col. 10, lines 12-col. 11, lines 37. Smetana et al teach the cationic that generate both cations and free radicals allowing the use of acrylates in their mixtures because of this duality. In col. 10, lines 54-58, Smetana et al teach that it is well known the aryl sulfonium salts generate free radicals in addition to cations during the photolysis process. In Ohne et al, see particularly the Abstract, col. 7, lines 9-34, col. 9, col. 15-16, paragraph bridging these two columns, col. 16, lines 34-46. The claims do not make clear if "no free radicals" as a limitation excludes any compound or combination of compounds that can generate free radicals thus excluding all combinations of materials that generate free radicals. What is encompassed by the compounds that generate free radicals is unclear. Are all cationic initiators that are art recognized to also generate free radicals also excluded from the compositions of claims 1, 9-12? Thus, the claim language leaves unclear what are the limits of this exclusionary language. With regard to applicant's own disclosure, on page 11, last lines, they state "The extent of entangling and miscibility of the two networks is so great that, in some systems, the (meth)acrylate cure can be initiated by the free radicals from the decomposition of the cationic photoinitiator in the absence of free radical photoinitiator." Thus, even applicants recognize that their systems are generating free radicals. Applicants do not define the limits of the free radical initiator that is excluded. Thus, the limits of the exclusion are unclear to workers of ordinary skill in the art.

4. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Liu et al

(5,147,727). The compositions of Liu et al wherein the aryloxy polyvinyl ethers having $X = O$

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mixed with epoxy compounds wherein the only given example of epoxy is bis (epoxyalkoxy)phenyl alkanes anticipate the instant compositions of claims 1 and 9 wherein 20%, i.e. the end point of the range of said poly vinyl ether present falls within the instant range for instant c) and 80 % of epoxide compound falls within the instant range for a) anticipate the instant compositions. In Liu et al, see particularly Abstract, col. 1, lines 39-52, 62-68, col. 2, lines 1-6, col. 3, lines 24-68, col. 4, lines 17-43, 56-62 and examples. There is no need to add an additional free radical initiator to the compositions of Liu et al because there are no free radical needs if only vinyl ethers and epoxy groups are present to cure. The examiner notes applicants have not limited their components c) to only those compounds needing free radical initiation to cure. The examiner also notes that the compositions of Liu et al are to be coated therefore must also be liquid.

5. Claims 17-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in Paper No. 6.

6. Claims 2-8, 13-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

7. Applicant's election with traverse of Group I, claims 1-16 and Species A of claim 9 in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the search and examination would not impose a serious burden upon the Office. This is not found persuasive because of the reasons set forth in the prior office action. The search and consideration of radiation curable compositions in general is quite different than processes of curing them and stereolithographic

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processes of curing them. These searches when combined encompass a minimum of three separate classes, Classes, 522, 430 and 264. The composition claims require no search of class 264, and the process claims of only curing require no search in classes 430 or 264, the process of stereolithographic imaging requires a search in class 264 and 430 if imagewise irradiation is occurring. The search for epoxy compositions is quite different than that of non epoxy compositions in class 430 and the searches with respect to the members given in the claims in class 522 is again radically different dependent upon what components are present. The burden of search if all are combined into one invention is excessive in the eyes of this examiner. Rejoinder will occur as required and requested by applicants within the guidelines set forth in the MPEP and office practice when and if time for such occurs. The examiner does note that claims 2-5 have the use of "preferably" in them with confusing multiple limits. No rejection is made as these claims are not under examination, however, such wording would be considered an issue of clarity. This alone would stop allowance if rejoinder was considered after final action in this application.

The requirement is still deemed proper and is therefore made FINAL.

8. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. What is meant by oxirane (epoxide) rings is unclear. It appears as if applicants intended to define oxirane but in view of poly (meth) acrylate not being read as poly being redefined by (meth), this language is confusing. If both oxirane and epoxide are the same then either oxirane or epoxide should be removed.

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9. Claims 1, 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, e), is found "one liquid poly(meth)acrylate having a functionality of more than 2 ". What function is being addressed here is unclear. The examiner has assumed the (meth)acrylate function for examination purposes. In a) is found "a liquid component consisting of one or more than one polyfunctional compound having at least two groups capable of reacting via or as a result of a ring-opening mechanism to form a polymeric network". What function is being addressed here is unclear. The examiner has assumed for examination purposes that it is the groups capable of reacting via or as a result of a ring-opening mechanism to form a polymeric network that are the function being addressed. In claim 10, a1) is found "an aromatic difunctional or more highly functional polyglycidyl ether" and "aromatic difunctional or more highly functional polyglycidyl ethers". What function is being addressed here is unclear. The examiner has assumed the function is glycidyl here for examination purposes. In claim 11, a) is found "an aliphatic and /or cycloaliphatic difunctional or more highly functional glycidyl ether" is found. What function is being addressed here is unclear. Is it the cycloaliphatic function or the glycidyl function? The examiner has assumed that the function is "glycidyl" for examination purposes. Thus, claims 1 and 9-12 are indefinite because these limits are not clear.

10. Claims 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 10 and 11 under d) is found similar language with respect to a compound having a least 2 hydroxyl groups which is reacted with ethylene oxide, with propylene

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oxide or with ethylene oxide and propylene oxide. It is not clear whether the compound has two hydroxyl groups after such a reaction or if the compound reacted is the one with the two hydroxyl groups or if even a process is being claimed here instead of the result of a process. Thus, this language is unclear. The examiner points to the top of page 18 of applicant's specification as a place to support whatever applicants intend this language to support. However, at this point the language is confusing. The compound shown on page 18 clearly has two hydroxyl groups and is derived from a phenolic compound by reaction of said phenolic compound with alkylene oxide. Are applicants referring to phenol groups as hydroxyl groups here?

11. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. X is twice defined in claim 12 with differing variables. This leaves unclear what X is. In the penultimate line on page 31 x is an integer from 1 to 4, but X is defined underneath (C-X) on page 32 as an integer from 0 to 20 although to what structure it refers is unclear. Y is also defined here but belongs in no structure in the claim and seems superfluous. The examiner notes that Z has been defined twice but both definitions are the same, thus there is no clarity issue with Z.

With respect to the last lines of claim 12, c) in claim 1 is required to have at least one unsaturated group and at least one hydroxyl group in its molecule and claim 12 requires that component c) contain a compound of the group defined in claim 12. Thus the examiner had ~~assumed upon reading c) that only compounds with the limitations set forth were c) and part of~~ c) weight percentages until she read the last lines of claim 12 wherein was found "... hydroxy-

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containing poly(meth)acrylate obtained by replacing at least some of the available hydroxyl groups of the compound of formula (C-1) to (C-IX) with epoxy groups." The "at least" here leaves unclear whether applicants are attempting to include compounds in defining c) that have no hydroxyl groups because at least would include all of the hydroxyl groups being epoxidized. The examiner just wants clarification on what is intended here with respect to c). If the intention is to define a compound outside the limits set forth in claim 1 then the claim would be objected to because of this and the species defined by such a group outside the genus set forth in claim 1. The examiner is also not sure if applicants are trying to include a fully epoxidized compound that forms a new hydroxyl group to fit the definition of c) in claim 1. Clarification is needed here. *The examiner notes for the record only the epoxidized compounds are part of applicant's elected species, i.e. those compositions with epoxy groups present.*

12. Claims 1, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melisaris et al (6,136,497) or Melisaris et al (WO 99/50711) optionally in view of Liu et al (5,147,727). All reference is made to Melisaris et al (6,136,497) but Melisaris et al (WO 99/50711) is an equivalent document with an earlier publication date of October 7, 1999. The first paragraph of Summary of the Invention of Melisaris et al, the composition set forth requires the presence of (1) at least one cationically polymerizable and/or at least one radically polymerizable compound, (2) at least one RCM or a PEPO. The second paragraph requires that 20-90 percent be actinic radiation curable and cationically polymerizable organic substances, 0.05 to 12 percent cationic initiator and 0.5 to 60 percent by weight RCM or PEPO. The ~~presence of a radical photoinitiator and free radically curable component is optional.~~ A further up to 10 percent by weight of customary additive is allowed. The (1) component, i.e. the

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radiation curable and cationically polymerizable organic substance in the next paragraph is preferably 20-80% cycloaliphatic polyepoxide with at least two epoxy groups or alternatively 3-70% polyglycidyl ether. Further, in the next paragraph 2 - 40% can be cationically polymerizable vinyl ether having either (a) at least two vinyl ether groups or (b) at least one hydroxyl or epoxy functionalized vinyl ether compound. Thus, the cationically curable (1) component present overall in the composition at 20-90% of the Melesaris et al composition can be a mixture of an epoxy compound and a vinyl ether compound with hydroxyl groups present in 2-40% by weight. Thus, the epoxy component would make up the rest of the 98-60% of the (1) component present at 20-90% of the total composition. With respect to instant claims 1 and 9, Melesaris et al teach the instant compositions wherein the optional free radical material is not present as described above. With respect to instant claim 12, the vinyl ethers taught useful by Melesaris et al are set forth in col 8, lines 16-47, with hydroxyl functionalized vinyl ethers including butanediol monovinyl ethers, cyclohexanediol monovinylethers, ethylglycolmonovinylether, hexanediol monovinyl ether and polyethyleneglycol monovinyl ethers. The use of any of these vinyl ethers is held prima facie obvious in the compositions of Melesaris et al because they are listed as alternatives. Other known hydroxyl vinyl ether compounds such as those of Liu et al would have been prima facie obvious to use because they are known to be commercially feasible and economical to produce cationically curable coatings without the deficiencies of the sole epoxy systems which take longer to cure and the acrylates that which are skin irritants and cure poorly in the presence of oxygen. In Liu et al, see particularly Background of the Inventions and the Invention. As to the range differences between the instant claims and Melesaris et al. The ranges overlap and at times have points

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within applicant's ranges, in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See particularly MPEP 2144.05.

13. Claims 1, 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over unpatentable over Melisaris et al (6,136,497) or Melisaris et al (WO 99/50711) in view of Smith (3,729,313), Tsao et al (4,156,035), Crivello et al (4,026,705), and/or Smetana et al (6,350,792 B1).). All reference is made to Melisaris et al (6,136,497) but Melisaris et al (WO 99/50711) is an equivalent document with an earlier publication date of October 7, 1999. Melisaris et al disclose the instant invention with the exception of (1) using free radical initiators when using acrylate compounds and (2) not requiring that an instant component c) be present. In Melisaris et al, see particularly Summary of the Invention, col. 9, lines 17-col. 10, lines 10, col. 10, lines 66-67 wherein any free radical photoinitiator is usable, col. 12, lines 18-35 wherein hydroxyl-containing trimethacrylates are disclosed as acrylates useable, lines 57 to col. 16, top of page wherein compounds like those in instant claim 12 are found, col. 17-18, col. 24, Component c) is the compound having at least one unsaturated group and at least one hydroxy group in its molecule. If component c) is a (meth) acrylate compound, Melisaris et al disclose always a free radical initiator with the use of a (meth) acrylate. Never is the (meth) acrylate compound used by Melisaris et al without one. However, the question arises as to what is a free radical initiator and what is meant by applicant's exclusion of such when the cationic photoinitiator present is for many of applicant's examples given in their specification known to be a free radical initiator as set forth by Smith (3,729,313), Tsao et al (4,156,035), and/or Crivello et al (4,026,705). Smith

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(3,729,313) disclose diaryliodonium salts as free radical initiators if used with sensitizers inclusive of 4,6-bis (trichloromethyl)-s-triazine, diphenylmethane, xanthane, acridine, methane, polymethine, thiazole, thiazine, azine, aminoketone, porphyrin, colored aromatic polycyclic hydrocarbons, p-substituted aminostyryl compounds and aminotriaryl methanes. In Smith, see particularly col. 2, lines 6-45. Tsao et al (4,156,035) teach aromatic onium salts, especially sulfonium salts, act to polymerize both epoxies and acrylates when mixed as in Table 1, formulation 5, and state in col. 4, lines 37-68, without the addition of the carbonyl type photoinitiators described. There is no mention of using an added sensitizer by Tsao et al for their sulfonium salts to be initiators of acrylates, ie free radical initiators. Crivello et al (4,026,705) teach that a host of sensitizer dyes for with diarylhalonium salts, e.g. iodonium salts, and such dyes are inclusive of many of the sensitizers of Smith (3,729,313) as set forth in col. 1 of Crivello et al. The Crivello systems are cationic cure epoxy systems for the most part. The substitution of one compound known to perform the same function for another given in the prior art is held prima facie obvious as is the addition of the product to the other to perform the same function. Applicants have presented comparative test results on page 26 of the specification. However, never do they compare a composition with the same amount of cationic sulfonium initiator wherein no free radical initiator is present with a mixture of these two when acrylates are present. Thus, there is no clear showing that the sole exclusion of the free radical initiator caused any unobvious results. As to the presence of component c), Melisaris et al teach their choice as part of the acrylate component of their compositions. With respect to instant claims 10-11, component d) is disclosed by Melisaris et al as a choice for the PEPO component in col. 19 especially lines 60-67. With respect to instant claims 1, 9-12, the compositions of Melisaris et al

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wherein the cationic initiator is chosen to be one both free radical and cationically functional such as some of the sulfonium and iodonium compounds listed by applicants would have been prima facie obvious as would have been the increase in the amount of onium salt to cover the added function required as done by applicants in their specification in order to reduce the number of materials to be handled and as the substitution of one known free radical initiator for another. The examiner notes that this rejection is made because of the confusion as to what is meant by applicant's "the composition contains no free radical initiator". The examiner again notes that applicant's comparison on page 26 is insufficient to overcome this rejection. First, Example 1 and 2 do not use the same amount of cationic initiator. Examples 4 and 7 do show compositions with only differences in the free radical initiator present or not but applicants only state that the properties are similar and that curing does occur apparently in both systems (the use of UVI-6974 without I-184), but the properties are not the same and some cure would be expected of the acrylate system by the art recognized ability of sulfonium initiators to act as free radical initiators. Further the showing is for 0.8 % cationic initiator thus is not commensurate in scope with the composition claimed and the cured material with the free radical initiator present was of higher tensile strength, higher elongation break and other variances in properties from the non I-184 cured material. T

14. Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ohe et al (5,698,345). The compositions of Ohe et al anticipate the compositions of instant claims 1 and 9 wherein the choice of 2-hydroxyethyl-acrylate or methacrylate as the aliphatic monomer being liquid at normal temperature from the list given by Ohe et al in col. 15, lines 29-59 is made. The selection of any

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one disclosed compound given as sufficient by Ohe et al is seen as clearly disclosed. The amount of this compound used with the epoxy compound is from 20 to 80 parts, preferably 40 to 70 parts, based on 100 parts of epoxy oligomer. The selection in Ohe et al of the first photoinitiator which is capable of simultaneously generating a radical species that activates radical polymerization and a Bronsted acid or Lewis acid that activates cationic polymerization, upon exposure to actinic radiation in the preferred range of 1 to 10 parts based upon 100 parts of epoxy oligomer reads on many of the cationic initiator groups cited by applicants in their specification. This leaves the amount of epoxy used at approximately 50-77% by weight, hydroxy used at 15 to 42% by weight, preferably 27-39% by weight, and the photoinitiator at 1-10% by weight. Thus, with respect to instant claims 1 and 9, the compositions of Ohe et al anticipate the instant compositions wherein the lower weight percentage points of 15 and 27% of acrylate compound are used and wherein the 2-hydroxyethyl acrylate or methacrylate are used. A worker of ordinary skill in the art would upon reading Ohe et al immediately envision the use of any of the monomers listed by them and the end points of the amounts of compounds useful given by Ohe et al are given with sufficient specificity as to anticipate applicant's compositions or in the alternative make obvious applicant's compositions. In Ohe et al, see particularly Abstract, col. 7, col. 9, col. 10, col. 15-16, col. 18-19. See MPEP 2131.03.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lapin et al disclose using vinyl ether and epoxy combinations with the same cationic initiators as used by applicants.

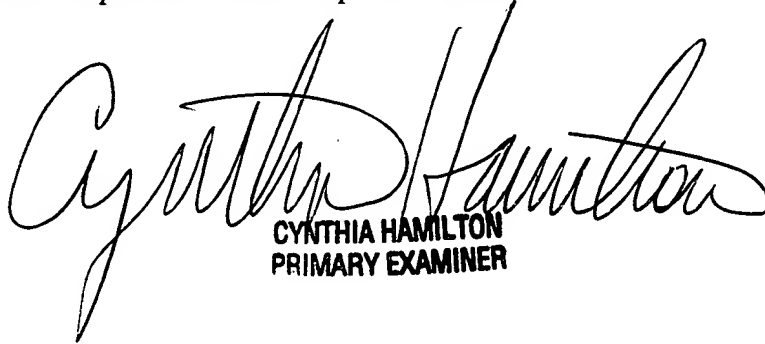
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is (703) 308-3626. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on (703) 308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 0661.

C. Hamilton
April 8, 2002



CYNTHIA HAMILTON
PRIMARY EXAMINER